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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,977	12/04/2001	Yasuhiro Tani	NMCIP027	1816

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BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

ELEY, TIMOTHY V

ART UNIT PAPER NUMBER

3724

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,977

Applicant(s)

TANI ET AL.

Examiner

Timothy V Eley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by the Japanese(411114808) reference.

a. The Japanese reference discloses a polishing agent for polishing a surface of a target object, the polishing agent comprising mother particles and abrading particles on surfaces of the mother particles. See abstract.

b. Regarding claim 2, whether or not the abrading particles remain on the mother particles while the polishing agent is being used to polish the target object would depend upon exactly how the agent is used. Therefore, this limitation is met by the Japanese reference.

c. Regarding claim 3, the average diameter of the abrading particles is 1/500-1/5 of the average diameter of the mother particles.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese(411114804) reference in view of Sinclair-Day et al.

a. The Japanese reference is explained above.

b. The Japanese reference does not disclose exactly how the polishing agent is produced.

c. Sinclair-Day et al discloses that it is well-known in the art to produce agglomerated particles in a slurry by stirring the particles a liquid.

d. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have produced the polishing agent of the Japanese reference by adding the mother particles into a liquid along which the abrading particles and stirring the mixture together in order to cause the particles to agglomerate in the slurry as taught by Sinclair-Day et al in order to produce a polishing solution.

5. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Towery(6270395) et al in view of the Japanese (411114808) reference.

a. Towery et al disclose a method of polishing a target object by supplying a specified amount of a polishing liquid containing abrasive particles between a polishing means and the target

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object; and causing the polishing means to move relative to the target object while keeping the polishing means practically in contact with the target object. See abstract and figure 2.

b. Towery et al does not disclose using a polishing agent comprising mother particles and abrading particles on surfaces of the mother particles.

c. The Japanese reference as explained above, discloses using a polishing agent comprising mother particles and abrading particles on surfaces of the mother particles in a slurry for polishing a target object.

d. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Towery et al by replacing the polishing liquid and abrasive particles with a polishing agent which comprises mother particles and abrading particles on surfaces of the mother particles in a slurry as taught by the Japanese reference.

e. Regarding claims 6-9, the polishing means may comprise a flat and smooth tape(belt), or a lapping plate(pad) which are both rotated at a specified speed. See column 13, lines 7-15.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

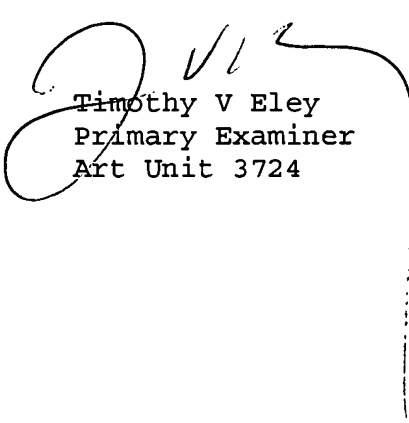
a. The cited references disclose coated abrasive particles.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V Eley whose telephone number is 703-308-1824. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Timothy V Eley
Primary Examiner
Art Unit 3724

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